

OCR Computer Science A Level

1.2.2 Applications Software

Flashcards



What is the difference between applications and systems software?



What is the difference between applications and systems software?

Applications software is utilised directly by the end-user whereas systems software ensures the high performance of the computer.



Give 3 examples of utilities



Give 3 examples of utilities

Three from

- Compression
- Disk defragmentation
- Antivirus
- Automatic backup
- Automatic updating



Give one advantage of using closed source code



Give one advantage of using closed source code

- Thorough, regular and well-tested updates
- Expert support and user manuals from company
- High levels of security as it is developed in a professional, controlled environment



State two features of open source code



State two features of open source code

- Does not require a license to be used
- Distributed with the source code
- Can be modified and sold on



Give two advantages of using compiled code over interpreted code



Give two advantages of using compiled code over interpreted code

- Faster to execute
- Does not require compiler to run



Give two advantages of using interpreted code over compiled code



Give two advantages of using interpreted code over compiled code

Two from:

- Is platform independent
- Runs instantly without time waiting for compilation
- Useful for debugging



What is assembly language?



What is assembly language?

A low-level language that has almost a one-to-one relationship with machine code. It is platform specific.



What are the stages of compilation?



What are the stages of compilation?

- Lexical analysis
- Syntax analysis
- Code generation
- Optimisation



What happens during syntax analysis?



What happens during syntax analysis?

- Tokens are compared to the rules of the programming language
- Syntax errors are identified
- Symbol table updated with more details
- Semantic analysis (finding logic errors)



What are the similarities and differences between static and dynamic linkers?



What are the similarities and differences between static and dynamic linkers?

Similarities: Both link external modules and libraries to main program

Static: Library code copied into the file. File size increased.

Dynamic: Addresses of libraries included within file. External updates automatically feed through to main program.



Give three advantages of using libraries.



Give three advantages of using libraries.

- Error-free
- Save time
- Re-usable
- No need to 'reinvent the wheel'
- Designed by experts



Describe the function of a loader



Describe the function of a loader

Provided by the operating system, a loader retrieves the library or subroutine from the given memory location.



What is the purpose of the optimisation stage of compilation?



What is the purpose of the optimisation stage of compilation?

- Reduce execution time
- Reduce inefficient sections of code
- Remove redundant code

